#### **CLAIMS**

#### We claim:

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1. A process for obtaining an aryloxypropanolamine of the chemical name 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol of the formula

# $\hbox{CH$_3$OCH$_2$CH$_2$CH$_2$CH$(OH$)$CH$_2$NHCH$(CH$_3$)$_2}$

### comprising:

- A) combining 4-(2-methoxyethyl)phenol with epichlorhydrin;
- B) reacting said combination of 4-(2-methoxyethyl)phenol and epichlorhydrin in an alkaline aqueous medium;
  - C) extracting and washing the organic phase reaction product of Step B with water at pH  $7.5 \pm 0.5$ ; and
  - D) obtaining a crude reaction product comprising 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane;
  - E) combining said 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane with isopropanolamine;
  - F) reacting said combination of 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane and isopropanolamine in an aqueous medium at a temperature about 30 °C, to obtain 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol.
  - 2. The process of claim 1, wherein:
    - A) said 4-(2-methoxyethyl)phenol and said epichlorhydrin are combined in a molar ratio of about 1:1.31.
- 25 3. The process of claim 2, wherein:
  - B) said reacting 4-(2-methoxyethyl)phenol and epichlorhydrin is at  $42.5 \pm 2.5$ °C; and
  - D) said crude reaction product is composed of about 97 to 99% of 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane.

- 4. The process of claim 3, wherein:
  - E) said 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane and isopropanolamine are combined in a molar ratio of about 1 : 5.25.
- 5. The process of claim 4, further comprising:
- G) extracting said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2propanol from said aqueous reaction medium with a polar solvent at a temperature of not more than about 25° C; and
  - H) removing said solvent by distillation under reduced pressure.
  - 6. The process of claim 5, further comprising:
- I) combining said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol with succinic acid in a molar ratio of approximately 1 : 2 in a solution of pH about 7.2, and
  - J) isolating from said solution the succinate form of said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol.
- 15 7. The process of claim 5, further comprising:
  - I) combining said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol with tartaric acid in a molar ratio of approximately 1:2 in a solution of pH about 6.2; and
- J) isolating from said solution the tartarate form of said 1-[4-)2-methoxyethyl)phenoxy]-3-[(1-methylethyl)amino]-2-propanol.

8. A product of the chemical name 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol of the formula

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5 made by a process comprising:

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- A) combining 4-(2-methoxyethyl)phenol with epichlorhydrin;
- B) reacting said combination of 4-(2-methoxyethyl)phenol and epichlorhydrin in an alkaline aqueous medium;
- C) extracting and washing the organic phase reaction product of Step B with water at pH 7.5 ±0.5; and
- D) obtaining a crude reaction product comprising 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane;
- E) combining said 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane with isopropanolamine;
- F) reacting said combination of 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane and isopropanolamine in an aqueous medium at a temperature about 30° C, to obtain 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol.
  - 9. The product of claim 8, wherein:
- A) said 4-(2-methoxyethyl)phenol and said epichlorhydrin are combined in a molar ratio of about 1:1.31.
  - 10. The product of claim 9, wherein:
    - B) said reacting 4-(2-methoxyethyl)phenol and epichlorhydrin is at  $42.5 \pm 2.5^{\circ}$  C; and
- D) said crude reaction product is composed of about 97 to 99% of 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane.
  - 11. The product of claim 10, wherein:
    - E) said 3-[4-(2-methoxyethyl)phenoxy]-1,2-epoxypropane and isopropanolamine are combined in a molar ratio of about 1:5.25.

- 12. The process of claim 11, further comprising:
  - G) extracting said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2propanol from said aqueous reaction medium with a polar solvent at a temperature of not more than about 25° C; and
- 5 H) removing said solvent by distillation under reduced pressure.
  - 13. The process of claim 12, further comprising:
    - I) combining said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol with succinic acid in a molar ratio of approximately 1 : 2 in a solution of pH about 7.2, and
- J) isolating from said solution the succinate form of said 1-[4-)2-methoxyethyl)phenoxy]-3-[(1-methylethyl)amino]-2-propanol.
  - 14. The process of claim 12, further comprising:
    - I) combining said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2propanol with tartaric acid in a molar ratio of approximately 1:2 in a solution of pH about 6.2; and
    - J) isolating from said solution the tartarate form of said 1-[4-)2-methoxyethyl)-phenoxy]-3-[(1-methylethyl)amino]-2-propanol.

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